



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,396	08/25/2003	Nader N. Abazarnia	884.392US2	2650
7590	08/06/2004		EXAMINER	
Schwegman, Lundberg, Woessner & Kluth, P.A. P.O. Box 2938 Minneapolis, MN 55402			KENNY, STEPHEN	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/647,396	ABAZARNIA ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Stephen J Kenny	3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 July 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 19-29 is/are pending in the application.
- 4a) Of the above claim(s) 24-29 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 19-23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foust et al. (US patent No 3663922) in view of Zielinski (US Patent No 4060889).

Regarding claims 19 & 21, Foust discloses a connector assembly comprising a first conductive layer (14) over a second conductive layer (12) to define a cable (10), wherein the conductive layers are insulated (16) from each other & are flexible; connecting the first conductive layer (14) to a terminal of the connector plug (34) comprising a part of the connector assembly (column 2, line 34 states that “the connector includes... a row of contacts 34) thereby expressly stating that the terminal (34) is “part of” the connector assembly; connecting the second conductive layer to another terminal of the connector plug (32) (column 2, lines 17+; Figures 1, 4, & 5).

Foust does not explicitly disclose connecting capacitors between the conductive layers.

Zielinski discloses a cable having conductive layers (30) wherein a plurality of capacitors are connected between said conductive layers (column 1, lines 18-23; column 3, lines 35-45 & Figure 2). The use of capacitors in flexible cables is advantageous in that they enable filtering to reduce the electrical noise in the signals carried by the cable. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to form a flexible

connector assembly as disclosed by Foust, with capacitors attached between the conductive layers as taught by Zielinski, in order to filter the electrical noise.

Regarding claim 22, Foust discloses the claimed invention by coating the conductive layers with insulation (17), however does not explicitly state that the insulative material is mylar. It would have been an obvious matter of design choice to use mylar as the insulative material, since applicant has not disclosed that mylar solves any stated problem or is for any particular purpose; furthermore, it appears as if the claimed invention would perform equally well with the insulative material disclosed by Foust. Additionally, applicant states on page 2, line 25 that mylar “or the like” insulative material may be used.

Regarding claim 23, as discussed above, it is well known to attach capacitors to the conductive layers in a flexible cable in order to reduce the electrical noise. Likewise, applicant states (on page 3, lines 29) that “the number of capacitors that are required to provide the level of noise decoupling and the reduction in equivalent series resistance and voltage droop required”. Therefore the use of capacitors to reduce/decouple the electrical noise within a flexible cable, will inherently affect the equivalent series resistance & voltage droop.

#### *Allowable Subject Matter*

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 7/6/04 have been fully considered but they are not persuasive. As indicated in the U.S.C. 103 rejection set forth above, the Foust/Zielinski combination clearly discloses connecting conductive layers (with capacitors as taught by Zielinski) to a terminal of a connector plug comprising a part of the connector assembly.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J Kenny whose telephone number is 703-306-0359. The examiner can normally be reached on mon - fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sk SK

7/26/04



DAVID P. BRYANT  
PRIMARY EXAMINER